

## Hot Tubs and/or Spas

10/2010

### Information for the installation of hot tubs and/or spas for residential dwellings.

Contact the Community Planning & Building Department for location information and other zoning requirements if installed outdoors.

#### **OUTDOOR INSTALLATIONS**

- Electrical permit and inspection required.
- Wiring methods shall be as required by NEC chapters 1 through 4.
- Conductor and overcurrent devices to be 125% of rated current of unit.
- A weatherproof receptacle shall be located between six (6) and twenty (20) feet from a hot tub or spa.
- All receptacles shall be GFCI protected.
- Lighting fixtures, lighting outlets and ceiling fans are not to be located over a hot tub or spa or in an area five (5) feet horizontally from the walls of a hot tub or spa.
- Switching devices shall be located at least five (5) feet horizontally from the inside walls of a hot tub or spa.
- Overhead service conductors are not allowed above a hot tub or spa in an area extending ten (10) feet horizontally from the walls of a hot tub or spa.
- Underground wiring is not allowed under or within an area five (5) feet horizontally from the walls of a hot tub or spa.
- Disconnecting means shall be accessible, located within sight and shall be at least five (5) feet horizontally from the walls of a hot tub or spa.
- All metal parts of electric equipment within five (5) feet of the walls of a hot tub or spa, as well as all
  electrical associated equipment of a hot tub or spa, shall be bonded together through a common grid by
  not less than a No. 8 solid copper conductor-insulated, covered or bare.
- Groundings required per NEC 680 for panelboards, motors and lights.

#### **INDOOR INSTALLATIONS**

- Electrical permit and inspection required.
- Wiring methods shall be as required by NEC chapter 3.
- Conductor and overcurrent devices to be 125% of rated current of unit.
- Receptacles to be a minimum of six (6) feet from the inside walls of a hot tub or spa.
- All receptacles within ten (10) feet of inside walls of a hot tub or spa shall be GFCI protected.
- Lighting fixtures, lighting outlets and ceiling fans located over or within five (5) feet from the inside walls
  of a hot tub or spa shall be a minimum of seven feet six inches (7'6") above maximum water level and be
  protected by GFCI.
- Wall switches shall not be located within five (5) feet horizontally of the inside walls of a hot tub or spa.
- All metal parts of electric equipment within five (5) feet of the inside walls of a hot tub or spa, as well as
  all electrical associated equipment including pump motors of a hot tub or spa, shall be bonded together
  by a bonding jumper not less than a No. 8 solid copper conductor-insulated, covered or bare.
- All electrical equipment located within five (5) feet of the inside walls of a hot tub or spa and all electrical equipment associated with the circulating system shall be grounded per NEC Article 250.
- All electric hot tub and spa water heaters shall be listed and shall have the heating elements subdivided into loads not exceeding forty-eight (48) amperes. Circuit conductors and overcurrent devices shall not be less than 125% of the total load of the nameplate rating.
- All self-contained hot tubs or spas, or a package hot tub or spa, shall be protected by GFCI.

#### **BUILDING CODES**

- Decks & elevated walking surfaces for single family dwellings shall be designed to support a minimum 40 pounds per square foot live load. Decks supporting hot tubs or spas shall be designed to support the weight recommended by the tub/spa manufacturer plus a 40 pounds per square foot live load on adjacent deck areas. A plan for the deck is required to verify that adequate support is to be provided.
- Any window within five (5) feet from the inside walls of a hot tub or spa and five (5) feet or less above the walking surface surrounding the area of the hot tub or spa shall be tempered safety glass.

# INDOOR SPA/ HOT TUB OR WHIRLPOOL

\*GFCI Protection Required

Switching device 5.0' minimum from spa/tub

No receptacles closer than 6.0'

All receptacles within 10.0' must be GFCI protected

OUTDOOR SPA/ HOT TUB OR WHIRLPOOL Switching device 5.0' minimum from spa/tub

At least one receptacle no closer than 6.0' and not more than 20.0'

All receptacles within 20.0' must be GFCI protected